City of Eugene
Energy Management Program Policies

Mission Statement

Develop and implement cost effective energy management and conservation strategies that support the principle of sustainability adopted by the Eugene City Council that the City will lead by example. This principle states in part that the City will operate its facilities in a sustainable manner and develop strategies to implement sustainable practices in maintenance and facility design.

This mission will be implemented through four strategic areas: 1) incorporating energy conservation measures in the construction of new buildings and the renovation of existing buildings; 2) adopting operating and maintenance practices that optimize energy conservation; 3) utilizing program tools to understand and manage energy conservation measures and practices; and 4) providing information to all employees on ways to increase energy conservation in the workplace.

Building Design and Construction

Goal : Incorporate cost-effective energy measures in facility planning, design and construction. This strategy will be implemented in three ways: energy projects in existing buildings; partial facility repair or remodel projects that include energy efficiency measures; and the construction or major renovation of facilities.

Energy Improvements in Existing Buildings

These facility design and construction projects are initiated with the primary purpose of addressing energy conservation deficiencies from a "whole building" perspective. The major elements of these projects are to:

- Identify existing buildings with history of high energy use and conduct a comprehensive energy analysis appropriate to the scale of the project.
- Review and prioritize the results of the energy analysis and select the measures to be implemented in order to produce energy projects with a simple payback of 10 years or less.
- Energy retrofits shall strive to meet current energy conservation criteria.
- Fund energy conservation measures from financial incentives from utility companies, "energy" loans from the Fleet Fund and other "energy" funds as they become available.
- Analyze and review building system performance at a level appropriate to the scale of the project.

Partial Renovations of Existing Buildings

These design and construction projects primarily address functional or maintenance needs in a facility, and address only selected portions of a facility. As such, they provide only a limited opportunity to address energy conservation deficiencies. The key elements of these projects include:

- Prior to project initiation, conduct an energy analysis appropriate to the scale of the project.
- Review and prioritize the results of the energy analysis and select the measures to be implemented.
- Fund energy conservation measures from project funds, financial incentives from utility companies, and/or "energy" loans from the Fleet fund.
- Analyze and review building system performance at a level appropriate to the scale of the project.

New Construction

These are major design and construction projects of new facilities or major additions and renovations to existing facilities providing the maximum opportunity to incorporate comprehensive energy conservation measures. In order to maximize energy efficiency in these projects:

- The project team shall identify, analyze and recommend a range of energy efficiency measures to be incorporated into the building design with the objective of meeting or exceeding Energy Edge Award criteria (20% energy use reduction beyond current Building Code).
- Include the Energy Edge Award requirements within the project program document.
- # Fund energy efficiency measures and building commissioning services from the project funds. Some energy efficiency measures may be offset by financial incentives from utility companies.
- Perform building commissioning services at a level appropriate to the project.

Building Operations Energy Efficiency

Goal : Operate and maintain buildings in a manner that optimizes energy efficiency while accommodating occupant comfort, functionality and ease of maintenance.

Operations and Maintenance Procedures

- Utilize a computerized maintenance management system to implement ongoing system of preventive maintenance, insuring optimal performance of existing equipment and systems.
- Utilize Direct Digital Control (DDC) to optimize mechanical system performance and identify malfunctions quickly.
- Replace failed equipment with higher efficiency models when possible.
- Provide ongoing staff training to maximize efficient building operations, such as the Building Operator Certification course.

- Identify equipment that is inefficient or at risk of imminent failure. Plan efficiency projects to correct deficiencies.
- Conduct periodic "retro-commissioning" projects in existing facilities to ensure systems, including the DDC control systems, are functioning optimally.

Energy Management Tools

Goal: Provide accurate and timely information to implement and support effective energy management actions and decisions.

Utility Accounting

- Provide monthly oversight of billing and usage, annual budgeting, prioritization of buildings for projects, verification of energy project performance and utility use information requested by building users.
- Utilize specialized database software for utility accounting that compiles and analyzes utility bills.

Energy Analysis

- Analyze potential efficiency measures to quantify energy savings, installation cost and incentive levels.
- Identify measures that meet cost-effectiveness criteria.
- Conduct post-project evaluations of the effectiveness of energy conservation measures and surveys on occupant comfort and satisfaction.

Commissioning

- Verify that building systems performance meets operational needs according to design criteria.
- Provide training for maintenance and operations staff and building users.

Energy Conservation in the Workplace

Goal: Provide information to employees to support and encourage the adoption of energy conservation practices in the workplace.

Education and Outreach

- Educate City staff about the impact of personal behavior on energy efficiency.
- Improve staff and public understanding of City' s Energy Program.
- Enhance awareness of energy issues for City staff and the public.

Coordination within the City's sustainability work program

- Coordinate Facility Management Division' s development of recommendations for staff energy conservation measures with other City work groups implementing sustainability efforts.
- Coordinate communication of energy conservation-related education and outreach with other City communications on sustainability.